

Measuring Light Array Sensor with ATEX

Catalog Numbers 45MLA-DxxxxPxx, 45MLA-ExxxxPxx

IMPORTANT See these instructions for future use.

Introduction

These Measuring Light Array Sensors comply with the Guideline 2014/34/EU Appendix I for device group II, and device category 3D for use in non-electrical dust environment (where dust in a mixture with air causes explosive atmosphere is not expected). However, if it happens, the best probability is that it occurs only rarely and only during a short time.

For installation, the following notes can be fulfilled. The operation temperature range is 0...55 °C (32...131 °F). The surface temperature of -70 °C (158 °F) cannot be exceeded.

45MLA parts comply with Ex II 3 D Ex tc IIIB T70°C DC X

The following parts comply with Ex II 3 D Ex tc IIIB T70°C DC X:

- 45MLA-DxxxxPxx
- 45MLA-ExxxxPxx
- 445L cables for 45MLA



ATTENTION: Safety Notes

- Ground plug of each profile has to be connected with a wire of 4 mm² (0.16 in.²) minimum.
- Each connection has to be secured with the cover provided.
- Check the front window and connection caps for proper sealing and damage.
- The controller does not comply with ATEX.



WARNING: If damaged, do not use the light curtain.

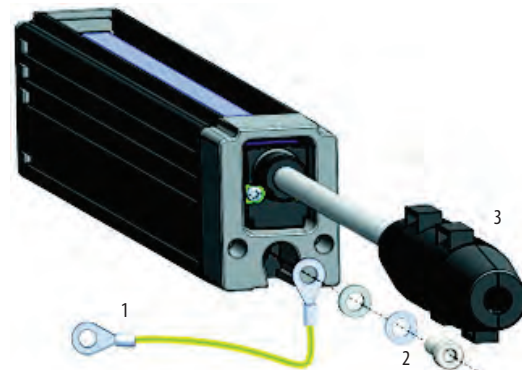
Power off the controller before unplugging the light curtain. Do not unplug while under power.

Specifications

EN 60079-0:2012 + A11:2013	
II	Device security class 2
3	ATEX safety zone 2 or 22
D	Danger through dust
Ex tc	ATEX protection class tc, protection by enclosure

EN 60079-0:2012 + A11:2013	
II	Device security class 2
IIIB	Nonconductive dust
T70 °C	Surface temperature, max
DC	Device security niveau EPL DC

Figure 1 - Installation



Ground Connection

Use the supported ground wire (4 mm² [0.16 in.²AWG]) to comply with Ex II 3 D Ex tc IIIB T70°C DC X according to EN 61241. Each light array profile (cascaded light curtains, transmitter, and receiver) must be connected with ground potential. The supported ground wire is shown as [1] in [Figure 1](#).

The ground screw [2] in [Figure 1](#) must have sufficient force to cut the thread inside the hole.

Connection Protection

To comply with Ex II 3 D Ex tc IIIB T70 °C DC X according to EN 61241, each connection has to be secured with the cover provided (see [3] in [Figure 1](#)). The housing helps prevent unintended opening in an explosive zone. Only a qualified technician can open the housing with a screwdriver.

Commissioning and Maintenance

For commissioning, operation, and to take the light array out of service, follow the Attention note carefully.

Rockwell Automation Support

Use the following resources to access support information.

Technical Support Center	Knowledgebase Articles, How-to Videos, FAQs, Chat, User Forums, and Product Notification Updates.	https://rockwellautomation.custhelp.com/
Local Technical Support Phone Numbers	Locate the phone number for your country.	http://www.rockwellautomation.com/global/support/get-support-now.page
Direct Dial Codes	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	http://www.rockwellautomation.com/global/support/direct-dial.page
Literature Library	Installation Instructions, Manuals, Brochures, and Technical Data.	http://www.rockwellautomation.com/global/literature-library/overview.page
Product Compatibility and Download Center (PCDC)	Get help determining how products interact, check features and capabilities, and find associated firmware.	http://www.rockwellautomation.com/global/support/pcdc.page

Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete the How Are We Doing? form at http://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002_-en-e.pdf.

Waste Electrical and Electronic Equipment (WEEE)



At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental information on its website at <http://www.rockwellautomation.com/rockwellautomation/about-us/sustainability-ethics/product-environmental-compliance.page>.

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